WHAT IS CLAIMED IS:

1. A layered ammonia oxidation catalyst comprising a refractory metal oxide, a layer of platinum disposed upon the refractory metal oxide and a layer of vanadia disposed upon the platinum.

2. The catalyst of claim 1 that is disposed upon a substrate.

3. The catalyst of claim 3 wherein the substrate comprises a "FeCrAlloy" foil having a herringbone pattern impressed upon its surface.

4. The catalyst of claim 3 wherein the substrate comprises a refractory ceramic having a honeycomb structure.

5. The catalyst of claim 1 wherein the refractory metal oxide comprises gamma-alumina having a surface area of about 60 to about 300 m^2/g.

6. The catalyst of claim 1 wherein the platinum is present in an amount of about 0.5 to about 4 wt.%, based on the weight of the refractory metal oxide.

7. The catalyst of claim 6 wherein the platinum is present in the amount of about 10 to about 100g/ft^3.

8. The catalyst of claim 1 wherein the vanadia is present in an amount of about 0.5 to about 4 wt.%, based on the weight of the refractory metal oxide.

9. The catalyst of claim 8 wherein the vanadia is present in the amount of about 13 to about 104g/ft^3.

10. A method for preparing an ammonia oxidation catalyst that comprises the steps of:

(a) depositing a refractory metal oxide upon the surface of a substrate;

(b) depositing a platinum component upon the surface of the substrate resulting from step (a);

(c) drying and thereafter calcining the substrate resulting from step (b) at a temperature of about 300 to about 700°C;

(d) depositing a vanadium component upon the surface of the substrate resulting from step (c); and

(e) drying and thereafter calcining the substrate resulting from step (d) at a temperature of about 300 to about 700°C.

11. The method of claim 10 wherein the substrate comprises a "FeCrAlloy" foil having a herringbone pattern impressed upon its surface.

12. The method of claim 10 wherein the substrate comprises a refractory ceramic having a honeycomb structure.

13. The method of claim 10 wherein the refractory metal oxide comprises gamma-alumina surface area of about 60 to about 300 m^2/g.

14. The method of claim 10 wherein the substrate resulting from step (a) is dried and thereafter calcined at a temperature of about 300 to about 700°C before carrying out step (b).

15. The method of claim 10 wherein in step (a), the refractory metal oxide is deposited upon the surface of the substrate by dipping the substrate into an aqueous slurry of the refractory metal oxide.

16. The method of claim 10 wherein in step (b), the platinum component is deposited on the substrate resulting from step (a) by spraying the surface of such substrate with an aqueous solution of the platinum component.

17. The method of claim 16 wherein the platinum component is utilized in the form of an aqueous solution of an amine-solubilized platinum hydroxide.

18. The method of claim 10 wherein in step (d), the vanadium component is deposited onto the surface of the substrate resulting from step (c) by dipping such substrate into an aqueous solution of the vanadium component.

19. The method of claim 18 wherein the vanadium component is utilized in the form of an aqueous solution of ammonium metavanadate.

20. A process for selectively oxidizing ammonia present in an exhaust gas stream to nitrogen which comprises contacting the exhaust gas stream with a layered ammonia oxidation catalyst in the presence of an oxidant at a temperature of about 200 to about 375°C, said layered ammonia oxidation catalyst comprising a refractory metal oxide, a layer of platinum disposed upon the refractory metal oxide and a layer of vanadia disposed upon the platinum.

21. The process of claim 20 wherein the oxidant comprises a gaseous stream containing at least about 10 wt.% oxygen.

22. The process of claim 21 wherein the gaseous stream comprises air.